

Claims

- [c1] 1. A method for obtaining information from a set-top box comprising: using a graphical user interface (GUI) on a computer to input a unique identifier for said set-top box; using said unique identifier to establish a connection across a network between said computer and said set-top box; querying for one or more internal states of said set-top box; and receiving said internal states at said computer, in response.
- [c2] 2. The method of claim 1, wherein said internal states include a diagnostic state.
- [c3] 3. The method of claim 1 wherein said network comprises a first and second network layer.
- [c4] 4. The method of claim 3 wherein said first network layer is an intranet.
- [c5] 5. The method of claim 4 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.
- [c6] 6. The method of claim 3 wherein said second network layer is an Internet.
- [c7] 7. The method of claim 3 wherein said second network layer is an intranet.
- [c8] 8. The method of claim 1 wherein said GUI comprises a web page.
- [c9] The method of claim 1 wherein said GUI comprises a web page.
9. The method of claim 1 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.
- [c10] 10. The method of claim 1 wherein said step of querying further comprises: generating a script at said computer; sending said script to an application server; and executing said script on said application server.
- [c11] 11. The method of claim 1 wherein said step of receiving further comprises: formatting said internal states into a web page at an application server; sending said web page to a web browser on said computer; and displaying said web

page on said web browser.

- [c12] 12. The method of claim 1 further comprising determining if said set-top box can be maintained or repaired remotely using said internal states.
- [c13] 13. The method of claim 12 further comprising: performing a maintenance or a repair activity remotely, if said set-top box can be maintained or repaired remotely; and dispatching a service technician, if said set-top box cannot be maintained or repaired remotely.
- [c14] 14. The method of claim 2 wherein said diagnostic state comprises a system summary.
- [c15] 15. The method of claim 2 wherein said diagnostic state comprises an identity.
- [c16] 16. The method of claim 2 wherein said diagnostic state comprises feature authorizations.
- [c17] 17. The method of claim 2 wherein said diagnostic state comprises a version.
- [c18] 18. The method of claim 2 wherein said diagnostic state comprises a network configuration.
- [c19] 19. The method of claim 2 wherein said diagnostic state comprises tuning information.
- [c20] 20. The method of claim 2 wherein said diagnostic state comprises RF network information.
- [c21] 21. The method of claim 2 wherein said diagnostic state comprises MPEG information.
- [c22] 22. The method of claim 2 wherein said diagnostic state comprises hardware information.
- [c23] 23. The method of claim 2 wherein said diagnostic state comprises memory.
- [c24] 24. The method of claim 2 wherein said diagnostic state comprises system information.

- [c25] 25. The method of claim 2 wherein said diagnostic state comprises channel information.
- [c26] 26. The method of claim 2 wherein said diagnostic state comprises program guide events.
- [c27] 27. The method of claim 2 wherein said diagnostic state comprises broadcast file system information.
- [c28] 28. The method of claim 2 wherein said diagnostic state comprises pay-per-view information.
- [c29] 29. The method of claim 2 wherein said diagnostic state comprises an entitlement management message status.
- [c30] 30. The method of claim 2 wherein said diagnostic state comprises passthru messages.
- [c31] 31. The method of claim 2 wherein said diagnostic state comprises last reset state information.
- [c32] 32. The method of claim 1 wherein said step of querying comprises accessing a diagnostic selection area in said GUI.
- [c33] 33. An apparatus comprising: a graphical user interface (GUI) on a computer; a unique identifier for a set-top box that is input into said GUI and establishes a connection across a network between said computer and said set-top box; one or more internal states of said set-top box that are queried from said computer to said set-top box across said network and received at said computer, in response.
- [c34] 34. The apparatus of claim 33, wherein said internal states include a diagnostic state.
- [c35] 35. The apparatus of claim 33 wherein said network comprises a first and second network layer.
- [c36] 36. The apparatus of claim 35 wherein said first network layer is an intranet.

- [c37] 37. The apparatus of claim 36 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.
- [c38] 38. The apparatus of claim 35 wherein said second network layer is an Internet.
- [c39] 39. The apparatus of claim 35 wherein said second network layer is an intranet.
- [c40] 40. The apparatus of claim 34 wherein said GUI comprises a web page.
- [c41] 41. The apparatus of claim 34 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.
- [c42] 42. An apparatus comprising: a graphical user interface (GUI) on a computer; a unique identifier for a set-top box that is input into said GUI and establishes a connection across a network between said computer and said set-top box; a script that is generated at said computer and sent to an application server that is interposed between said computer and said set-top box; one or more internal states of said set-top box that are queried when said script is executed on said application server and received at said computer.
- [c43] 43. The apparatus of claim 42 further comprising: a web page having said internal states that is formatted and sent to said application server; and a web browser on said computer that receives said web page and displays said web page.
- [c44] 44. A system for obtaining information from a set-top box comprising: means for using a graphical user interface (GUI) on a computer to input a unique identifier for said set-top box; means for using said unique identifier to establish a connection across a network between said computer and said set-top box; means for querying for one or more internal states of said set-top box; and means for receiving said internal states at said computer, in response.
- [c45] 45. The system of claim 44, wherein said internal states include a diagnostic state.
- [c46] 46. The system of claim 44 wherein said network comprises a first and second

network layer.

- [c47] 47. The system of claim 46 wherein said first network layer is an intranet.
- [c48] 48. The system of claim 47 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.
- [c49] 49. The system of claim 46 wherein said second network layer is an Internet.
- [c50] 50. The system of claim 46 wherein said second network layer is an intranet.
- [c51] 51. The system of claim 44 wherein said GUI comprises a web page.
- [c52] 52. The system of claim 44 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.
- [c53] 53. The system of claim 44 wherein said means for querying further comprises: means for generating a script at said computer; means for sending said script to an application server; and means for executing said script on said application server.
- [c54] 54. The system of claim 44 wherein said means for receiving further comprises: means for formatting said internal states into a web page at an application server; means for sending said web page to a web browser on said computer; and means for displaying said web page on said web browser.
- [c55] 55. The system of claim 44 further comprising means for determining if said set-top box can be maintained or repaired remotely using said internal states.
- [c56] 56. The system of claim 55 further comprising: means for performing a maintenance or a repair activity remotely, if said set-top box can be maintained or repaired remotely; and means for dispatching a service technician, if said set-top box cannot be maintained or repaired remotely.
- [c57] 57. The system of claim 44 wherein said means for querying is accomplished by means for accessing a diagnostic information selection area in said GUI.
- [c58] 58. A computer program product comprising a computer useable medium

having computer readable program code configured to cause a computer to obtain information from a set-top box comprising: computer readable program code configured to cause a computer to enable a graphical user interface (GUI) which receives a unique identifier for said set-top box; computer readable program code configured to cause a computer to use said unique identifier to establish a connection across a network between said computer and said set-top box; computer readable program code configured to cause a computer to query for one or more internal states of said set-top box; and computer readable program code configured to cause a computer to receive said internal states at said computer, in response.

- [c59] 59. The computer program product of claim 58, wherein said internal states include a diagnostic state.
- [c60] 60. The computer program product of claim 58 wherein said computer network comprises a first and second network layer.
- [c61] 61. The computer program product of claim 60 wherein said first network layer is an intranet.
- [c62] 62. The computer program product of claim 61 wherein said intranet includes one or more set-top boxes connected to one or more cable outlets, which are in turn connected to one or more nodes, which are in turn connected to an application server.
- [c63] 63. The computer program product of claim 60 wherein said second network layer is an Internet.
- [c64] 64. The computer program product of claim 60 wherein said second network layer is an intranet.
- [c65] 65. The computer program product of claim 58 wherein said GUI comprises a web page.
- [c66] 66 The computer program product of claim 58 wherein said unique identifier comprises an IP address, a MAC address, or a serial number.

- [c67] 67. The computer program product of claim 58 wherein said computer readable program code configured to cause a computer to query further comprises:
computer readable program code configured to cause a computer to generate a script at said computer; computer readable program code configured to cause a computer to send said script to an application server; and computer readable program code configured to cause a computer to execute said script on said application server.
- [c68] 68. The computer program product of claim 58 wherein said computer readable program code configured to cause a computer to receive further comprises:
computer readable program code configured to cause a computer to format said internal states into a web page at an application server; computer readable program code configured to cause a computer to send said web page to a web browser on said computer; and computer readable program code configured to cause a computer to display said web page on said web browser.
- [c69] 69. The computer program product of claim 58 further comprising computer readable program code configured to cause a computer to determine if said set-top box can be maintained or repaired remotely using said internal states.